

Self-Loading Vehicle for Shipping Containers

Abstract of Disclosure

A U-shaped vehicle with flexible beams equipped with an adjustable toe-angle, variable height suspension. Containers are attached between the beams of the vehicle. The rear suspension has a variable toe angle to control the spread of the beams so the vehicle can back around a container. Rear wheel axles are mounted on arms connected to pivot points. An axle and its pivot points are non-co-planar. The pivot points are angled so that an outer pivot point is higher than an inner pivot point. When the vehicle is lowered close to the ground, the rear wheels develop slight toe out. When the vehicle is raised above its normal ride height, the rear wheels develop slight toe in, and the beams of the vehicle spread apart when the vehicle is driven in reverse.

Figures